PTO/SB/08a (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION PLOST COURT	Application Number Filing Date		
INFORMATION DISCLOSURE	First Named Inventor	Peter	George Robin Smith
STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Art Unit		
(nector submission under or or it mas,	Examiner Name		
	Attorney Docket Number		DYOUP0315US

U.S.PATENTS									Remove		
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue D)ate	Name of Pate of cited Docu	entee or Applicant ment	Releva		Lines where ges or Relev	
	1										
If you wish to add additional U.S. Patent citation information please click the Add button.									Add		
			U.S.P.	ATENT	APPLI	CATION PUBL	LICATIONS		Remove		
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publica Date	ition	Name of Pate of cited Docu	entee or Applicant ment	Releva		Lines where ges or Relev	
	1										
If you wis	h to ac	dd additional U.S. Publi	shed Ap	plication	citation	n information p	please click the Add	buttor	ı. Add		
				FOREIG	SN PAT	ENT DOCUM	ENTS		Remove		
Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²		Kind Code ⁴	Publication Date	Name of Patentee Applicant of cited Document	e or ∫	where Rel	or Relevant	T5
	1										
If you wish to add additional Foreign Patent Document citation information please click the Add button Add											
NON-PATENT LITERATURE DOCUMENTS Remove											
Examiner Initials* Cite No Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.							T 5				

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number		
Filing Date		
First Named Inventor Peter		George Robin Smith
Art Unit		
Examiner Name		
Attorney Docket Number		DYOUP0315US

1	Suhara, T. et al. "Waveguide Quasi-Phase-Matched Sum-Frequency Generation Device for High-Efficiency Optical Sampling", IEEE Photon. Technol. Lett. 11 No 8 August (1999) 1027	
2	Chou, M. H. et al. "1.5-µm-Band Wavelength Conversion Based on Cascaded Second-Order Nonlinearity in Waveguides", IEEE Photon. Technol. Lett. 11 No. 6 June (1999) 653.	
3	Kanbara, H. et al. "All-Optical Switching Based on Cascading of Second-Order Nonlinearities in a Periodically Poled Titanium-Diffused Lithium Niobate Waveguide", IEEE Photon. Technol. Lett. 11 No. 3 March (1999) 328.	
4	Parameswaran, K. R. et al. "Low-Power All-Optical Gate Based on Sum Frequency Mixing in APE Waveguides in PPLN", IEEE Photon. Technol. Lett. Vol. 12, No. 6, June (2000).	
5	Di Lallo, Annarita et al. "Second harmonic generation in reverse proton exchanged Lithium Niobate waveguides", 12 February (2001) Vol. 8, No. 2. Optic Letter Express 232.	
6	Bortz, M. L. et al. "Depth profiling of the d33 nonlinear coefficient in annealed proton exchanged LiNbO3 waveguides,"App. Phys. Lett., 62, pp. 2012-2014 (1993).	
7	Amin, J. et al. "Blue light generation in a periodically poled Ti: Lithium Niobate channel waveguide", Optics Communications 135 (1997) 41-44.	
8	Schreiber, G. et al. "Efficient Cascaded Difference Frequency Conversion in Periodically Poled Ti: Lithium Niobate Waveguides using Pulsed and CW Pumping", Appl. Phys. B73,501-504 (2001).	
9	Young, W. M. et al. "Fabrication, Characterization, and Index Profile Modeling of High-Damage Resistance Zn-Diffused Waveguide in Congruent and MgO: Lithium Niobate", Lightwave Technol. 10, 1238, (1992).	
10	Twu, Ruey-Ching et al. "Zn Indiffusion Waveguide Polarizer on Y-cut LiNbO3 at 1.32-µm Wavelength", IEEE Photonics Technology Letters, Vol. 12, No. 2, February (2000).	
11	Suhara, T. et al. "Fabrication Zn: Lithium Niobate Waveguides by Diffusing ZnO in Low Pressure Atmosphere", Jpn. J. Appl. Phys. 39 (2000) L864	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number		
Filing Date		
First Named Inventor Peter		George Robin Smith
Art Unit		
Examiner Name		
Attorney Docket Number		DYOUP0315US

	12	Herreros, B. et al. "Optical Waveguides by Zn diffusion from Vapor Phase", Appl. Phys. Lett. 66 (12), 20 March (1995).							
	13	Nevado, Ruben et al. "Preservation of Periodically Poled Structures in Zn-Diffused Lithium Niobate Waveguides", Jpn. J. Appl. Phys. Vol. 39 (2000) pp. L488-L489, Part 2, No. 6A, June 2000.							
	14	Domenech, M. et al. "Blue Light by SGH in Diode Pumped LiNbO3 Waveguides", Physica Status Sol. 192.1 (2002-03-15): 135-138							
	15	Cantelar, E. et al. "Second-harmonic generation in Zn-diffused periodically poled LiNbO3 channel waveguides" Appl. Phys B 73, 515-517 (2001)							
	16	Barry, lan E. et al. "Microstructuring of lithium niobate using differential etch-rate between inverted and non-inverted ferroelectric domains" Materials Letters 37 (1998) 246-254							
	17	Shigematsu, Yasuaki et al. "Fabrication of LiNbO3 TE/TM Waveguides for 1.5 µm Wavelength Band by Zn/Ni Diffusion in Low-Pressure Atmosphere" Jpn. J. Appl. Phys. Vol 41 (2002) 4825-4827							
	18	Yang, Chunhui et al. "Studies of photorefractive crystals of double-doped Ce, Fe:LiNbO3" Optics Communications 175 (2000) 247-252							
If you wish to add additional non-patent literature document citation information please click the Add button Add									
EXAMINER SIGNATURE									
Examiner Signature Date Considered									
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.									
¹ See Kind Codes of USPTO Patent Documents at <u>www.USPTO.GOV</u> or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.									

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number		
Filing Date		
First Named Inventor Peter		George Robin Smith
Art Unit		
Examiner Name		
Attorney Docket Number		DYOUP0315US

		CERTIFICATION	N STATEMENT					
Plea	ase see 37 CFR 1	.97 and 1.98 to make the appropriate select	ion(s):					
	That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).							
OR	!							
	That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).							
	See attached ce	rtification statement.						
	Fee set forth in 3	7 CFR 1.17 (p) has been submitted herewit	h.					
✓	None							
		SIGNA	TURE					
	ignature of the ap n of the signature.	plicant or representative is required in accor	dance with CFR 1.33, 10.1	18. Please see CFR 1.4(d) for the				
Signature		/Don W. Bulson/	Date (YYYY-MM-DD)	2006-05-24				
Name/Print		Print Don W. Bulson Re		28192				
pub 1.14	lic which is to file it. This collection it.	rmation is required by 37 CFR 1.97 and 1.98 (and by the USPTO to process) an applications in the complete, included the complete of the comple	on. Confidentiality is gover uding gathering, preparing	rned by 35 U.S.C. 122 and 37 CFR and submitting the completed				

require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria**,

VA 22313-1450.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
 - 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.